



THE ATMOSPHERIC RESERVOIR

Examining the Atmosphere and Atmospheric Resource Management

Congress approves \$2 million for cloud seeding research

By Darin Langerud

The 107th Congress is still in session, debating and passing legislation to fund the government for fiscal year 2002. One of the appropriations bills already passed, however, is the Energy and Water bill, which includes funding for the Departments of Interior and Energy, the Army Corps of Engineers, and the Bureau of Reclamation to name a few. Within the bill this year is a *weather damage modification program* (WDMP) to be created in and administered by the Bureau of Reclamation. The WDMP will provide up to \$2 million dollars for states with operational cloud seeding programs to conduct research for evaluating and improving operations. This is the first federal money allocated to cloud seeding research since the elimination of the State-Federal Atmospheric Modification Program in 1994.

The impetus behind the legislation came largely through the work of the North American Interstate Weather Modification Council (NAIWMC), an association of states interested in cloud seeding operations and furthering scientific knowledge through research. The NAIWMC was first

established in 1975, and since 1998 has focused on regaining funding for cloud seeding research. North Dakota, through the Atmospheric Resource Board, is a member state of the NAIWMC and has played an integral role in its success.



The University of North Dakota's specially instrumented Citation II aircraft has been employed in cloud seeding research in North Dakota.

The Bureau of Reclamation has yet to set up the program, so many details of its focus and administration are yet to be determined. However, it is expected that program administrators will accept proposals from states with cloud seeding operations and put them through a peer-review process, funding the proposals they find most scientifically credible. North Dakota's long history in cloud seeding research will be a valuable asset with this type of administration, as four major field research projects have been successfully conducted in the state since 1985. Those programs have included scientists and equipment from the University of North Dakota, South Dakota School of Mines and Tech-

nology, Colorado State University, Weather Modification, Inc., and labs within the National Oceanic and Atmospheric Administration.

Since 1994, when the last federally funded cloud seeding research

program was discontinued, there have been some notable advances in cloud seeding technology, primarily through improvements to seeding equipment and seeding agent effectiveness. Greater advances in instrumentation, including

more sensitive radars, satellites, and global positioning systems will allow observation of clouds and seeding effects at a level that have never before been possible. The ability to conduct atmospheric research with this level of capability will help improve our knowledge of the atmosphere, the clouds that reside within it, and our ability to modify them to our advantage. We look forward to the challenge! ■

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